

ABSTRACT OF THE DISCLOSURE

1 The invention provides high solids epoxy-based autodeposition coating materials and a
2 means to obtain the high solids epoxy-based autodeposition coating materials that
3 eliminates/minimizes the need for process solvents. An epoxy pre-polymer is used. The epoxy
4 pre-polymer is combined with ethylenically unsaturated monomer, as an alternative to organic
5 solvent, to yield an epoxy- monomer blend, which may be blended with other coating
6 components and additives. The resulting blend is then dispersed in water with surfactant and the
7 ethylenically unsaturated monomer is polymerized (in the presence of other formulation
8 components) to yield a dispersion. The dispersion may then be used as one component of a
9 coating formulation. The coating formulation can then be applied to materials and cured to form
10 a final coating.